It is an object of the present invention to provide a phosphor from a class of nitridosilicates ~~in accordance with the preamble of claim 1~~ with the highest possible efficiency. A further object is to provide a light source using this phosphor and a process for producing this efficient phosphor.

ler 3/10/05

On page 2, delete the paragraph beginning on line ~~4~~ 5 through line ~~6~~ 7 in its entirety and insert the following:

These and other objects are attained in accordance with one aspect of the present invention directed to a high-efficiency phosphor from the class of the oxynitridosilicates having a cation M and the empirical formula $M_{(1-c)}Si_2O_2N_2:D_c$, where M contains Sr as a constituent and where D is a divalent doping comprising europium, wherein Sr alone or $Sr_{(1-x-y)}Ba_YCa_x$ with $x+y < 0.5$ is used for M, the oxynitridosilicate completely or predominantly comprising the high-temperature-stable modification HT.

Another aspect of the present invention is directed to a light source having a primary radiation source which emits radiation in the short-wave region of the optical spectral region in the wavelength range from 50 to 480 nm, this radiation being completely or partially converted into secondary radiation of a longer wavelength, in particular in the visible spectral region, by means of at least a first phosphor as described above.

Yet another aspect of the present invention is directed to a process for producing the high-efficiency phosphor described above, comprising the steps of: a) providing the starting products SiO_2, Si_3N_4, remainder MCO_3, as well as a Eu precursor, in a